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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,638	02/16/2002	Thomas R. Gross	TGR 100C	2580

7590 07/28/2003
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EXAMINER

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 07/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,638

Applicant(s)

GROSS ET AL.

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *the housing* (clm. 1, 10), *the acute cutting angle* (clm. 2), *the at least two major discharge streams* (clms. 4, 6, 10), *the different major discharge directions* (clms. 4, 6, 10), *the bellyband ends at about 90 degrees to about 135 degrees away from the chipping point* (clm. 8), *the discharge port* (clm. 10), *the multi-sided rear wall* (clm. 12), *wherein the transition has at least 5 sides* (clm. 15) and *an extended void* (clms. 7, 17) must be clearly shown/illustrated/labeled or the feature(s) canceled from the claim(s). No new matter should be entered.

Additionally, with regard to the drawings, fig. 9, reference characters 414 and 410 appear to label the same part.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "422" has been used to designate both "*rear wall*" and "*blade*" additionally reference character "424" has been used to designate both "*frontal wall*" and "*pockets*".

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 416, *discharge port*.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 420, 434, 436. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 4, 6-8 and 10-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 7 and 8, it is unclear what the terms “*the transition*” and “*the bellyband*” refer to; there are no antecedent bases for these terms in the claims.

Additionally, with regard to claim 8, failure to positively recite/define a “chipping point”, renders a clear understanding of the claim difficult.

With regard to claims 4, 6 and 10, the claims fails to positively recite the critical interrelationship between the bellyband and the rest of the components (housing, cutting drum, cutting implement of the claimed invention.

With regard to claims 7 and 17, it is not clear what an extended void refers to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11 and 17, as best as can be understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Morey (5,005620). Morey discloses a housing (18) a cutting drum (23),

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a cutting implement (70), a bellyband (40) a transition communication with the bellyband (fig. 4) and a discharge port (22).

With regard to claim 11, as best as can be understood, Morey discloses a drum shredder wherein the transition has a non-linear (fig. 4) rear wall.

With regard to claim 17, as best as can be understood, Morey discloses a void (fig. 4). Examiner understands a void to be a space and notes a space between the bellyband, transition and discharge port (22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-9 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morey 5,005,620 in view of Bouwers et al. (5,692,548). With regard to claims 1-3, 10 and 18, Morey discloses a drum shredder (fig. 4) for reducing material comprising a housing (18) a cutting drum (23) rotatably mounted within the housing, at least one cutting implement (70), an anvil (130) and a drive (24) connected to the drum. Morey does not disclose the cutting drum to be tapered. Bouwers teaches in a wood chipper the use of a tapered chipping drum, the tapered drum being tapered toward the middle section to form two regions each region having at least one cutting implement (fig. 4). Bouwers teaches this construction so as to increase production

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capabilities of the drum shredder/chipper. Because the references are from a closely related art and deal with a similar problem (i.e. discharge of the cut/formed chips) it would have been obvious at the time of the invention to one having ordinary skill in the art to replace Morey's non-tapered chipping drum with a tapered drum as taught by Bouwers so as to provide increased production capabilities.

As to the anvil cooperating with the cutting drum to provide an acute cutting angle (clm. 2). Examiner notes that a tapered drum in conjunction with the straight anvil (130) results in an acute angle between the taper portions of the drum and the anvil.

With regard to claims 4 and 6 as best as can be understood, Morey discloses a bellyband (40) and transition and discharge port (22).

With regard to claim 7, as best as can be understood, Morey discloses a transition conforms to a cutting drum (fig. 4) and a void. (See above with reference to claim 17)

With regard to claim 8, as best as can be understood, Morey does not disclose a bellyband ends at about 90 degrees to about 135 degrees away from the chipping point. It would have been obvious to one having ordinary skill in the art at the time of the invention to construct the bellyband ends at about 90 degrees to about 135 degrees away from the chipping point, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

With regard to claim 9, Morey discloses a cutting implement (70) has a pocket (72).

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With regard to claims 12-15, Morey discloses a semi-circular wall. Morey does not disclose a transition having a multi-sided rear wall, a V-shaped wall, inverted V-shaped or at least 5 sides. It would have been obvious of design choice to one having ordinary skill in the art to construct Morey having a transition wherein the wall is multi-sided, v-shaped or inverted v-shaped since Applicant has not discloses that such shaped solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a transition having any shape conforming to that drum and bellyband.

With regard to claim 16, Morey does not disclose a bellyband having substantially "V-shaped" or inverted V-shaped wall. Morey does however disclose a bellyband conforming to the contour of the drum. It would have been an obvious matter of design choice to construct the belly band having a substantially "V-shaped" or inverted V-shaped wall, since Applicant has not disclose that such construction solves a stated problem or is for any particular purpose. Additionally it appears that the invention would perform equally well with a bellyband of any construction such that the bellyband conforms to the construction of the drum, as disclosed by Morey.

With regard to claim 18, as best as can be understood and as noted above with reference to claim 1, Bouwers teaches the use of a tapered cutting drum. For the reasons stated above, it would have been obvious at the time of the invention to replace Morey's non-tapered cutting drum with a tapered cutting drum as taught by Bouwers so as to increase production capabilities of the cutting drum.

With regard to claim 19, as best as can be understood, Morey disclose a pocket (72).

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With regard to claim 20, as best as can be understood, Morey discloses a bellyband (40) conforms to the cutting drum (fig. 4).

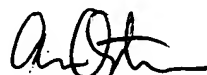
Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morey (5,005,620) in view of Bouwers et al. (5,692,548) as applied to claim 1 above, and further in view of Downie (4,738,402). Morey does not disclose the cutting drum to taper toward both ends. Downie teaches in a shredder waste recovery system the use of a drum (3) having a taper at both ends. Downie teaches this construction so as to shred material. Because the references are from a closely related art, it would have been obvious at the time of the invention to one having ordinary skill in the art to construct the drum having a taper at both ends as taught by Downie so as to shred material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (703) 305-5299. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Allen Ostrager can be reached at (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

SSelf
July 23, 2003



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